

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A building envelope panel for cladding ~~material~~ a building, said panel comprising:

an intermediate layer including a front face and a rear face

an outer air permeable cover generally covering the entire front face of the intermediate layer; and

an inner air permeable cover generally covering the entire rear face of the intermediate layer,

wherein the intermediate layer is provided with a graduated filtering profile such that, along an airflow direction of the intermediate layer, particles of decreasing sizes are trapped.

2. (Currently Amended) A ~~cladding material~~ building envelope panel according to claim 1, wherein filtering characteristics of the intermediate layer are such as to trap relatively large particles towards an outer cover end of the intermediate layer and to trap relatively smaller particles towards an inner cover end of the intermediate layer.

3. (Currently Amended) A ~~cladding material~~ building envelope panel according to claim 1, wherein the intermediate layer has thermal insulating properties.

4. (Currently Amended) A ~~eladding-material~~ building envelope panel according to claim 1, wherein the intermediate layer comprises one or more of: mineral wool, wet-blown cellulose and glass wool.
5. (Currently Amended) A ~~eladding-material~~ building envelope panel according to claim 1, wherein the intermediate layer is provided with one or more of: membranes, fibres, pulp or cellular based materials, or modified aerated concrete.
6. (Currently Amended) A ~~eladding-material~~ building envelope panel according to claim 5, wherein the intermediate layer comprises fibres.
7. (Currently Amended) A ~~eladding-material~~ building envelope panel according to claim 1, wherein the ~~eladding-material~~ intermediate layer comprises filter materials for one or more of: particulate emissions, gas pollutants, chemical agents and biological agents.
8. (Canceled).
9. (Currently Amended) A ~~eladding-material~~ building envelope panel according to claim ~~[[8]]~~ 1, wherein the panel ~~units are~~ is provided in modular format.
10. (Currently Amended) A ~~eladding-material~~ building envelope panel according to claim 1, wherein the intermediate layer is comprises a plurality of one or more separate filter layers, of different filtering characteristics.

11. (Currently Amended) A ~~eladding-material~~ building envelope panel according to claim 10, wherein each one of the separate filter layers of the intermediate layer is selected to extract at least one of a specified range of particle sizes, gaseous pollutants, chemical pollutants, and biological agents.

12. (Currently Amended) A ~~eladding-material~~ building envelope panel according to claim 11, wherein the plurality of one or more separate filter layers of the intermediate layer together define substantially a complete filter spectrum of particulate and other pollution.

13. (Currently Amended) A ~~eladding-material~~ building envelope panel according to claim 1, wherein the intermediate layer is configured as a single filter layer having filtering characteristics that vary across its thickness.

14. (Currently Amended) A ~~eladding-material~~ building envelope panel according to claim 10, wherein each of the plurality of one or more separate filter layers of the intermediate layer is independently replaceable.

15. (Currently Amended) A ~~eladding-material~~ building envelope panel according to claim 10, wherein each of the plurality of one or more separate filter layers of the intermediate layer comprises one or more disposable filter elements.

16. (Currently Amended) A building envelope cladding method for cladding a building ~~or other construction~~ at a particular location, comprising:

a) identifying the nature of pollutants at that location;

b) establishing an appropriate filter configuration for that building ~~or other construction~~ at that location;

c) forming ~~cladding~~ building envelope panel units for cladding the building ~~or other construction~~, the panel units having a graduated filtering profile across their thickness according to the filter configuration such that, along an airflow direction of the panel units, particles of decreasing sizes are trapped, wherein each of the cladding panel units comprises:

an intermediate layer providing the graduated filtering profile and including a front face and a rear face;

an outer air permeable cover generally covering the entire front face of the intermediate layer; and

an inner air permeable cover generally covering the entire rear face of the intermediate layer; and

d) applying the panel units to the ~~building or other construction~~ building's envelope.

17. (Currently Amended) A building ~~or other construction~~ comprising a plurality of building envelope panels ~~comprising the cladding material~~ according to claim 1.

18. – 19. (Canceled).

20. (Currently Amended) A method for improving air quality in a particular location, the method comprising:

a) placing at that location a building ~~or other construction adopting air permeable cladding material; the cladding material~~ having its envelope clad in air permeable building envelope panels; the air permeable envelope panels comprising:

a filtration layer for removing one or more of: particulate emissions, gas pollutants, chemical agents and biological agents as air passes from the exterior of the building ~~or other construction~~ to its interior, the filtration layer including a front face and a rear face;

an outer air permeable cover generally covering the entire front face of the filtration layer; and

an inner air permeable cover generally covering the entire rear face of the filtration layer, wherein the filtration layer is provided with a graduated filtering profile such that, along an airflow direction of the filtration layer, particles of decreasing sizes are trapped; and

b) arranging for filtered air from within the building ~~or other construction~~ to pass to the exterior of the building ~~or other construction~~.

21. (Previously Presented) The method for improving air quality according to claim 20, wherein the filtration layer is an intermediate layer providing the graduated filtering profile.

22. – 25. (Canceled).

26. (Previously Presented) A cladding material according to claim 1, wherein the intermediate layer has sound insulating properties.

27. (New) The for improving air quality according to claim 20 comprising the building envelope panels according to claim 1.

28. (New) A breathable building cladding material for cladding a building envelope, comprising:

an intermediate layer including a front face and rear face;

an outer air permeable cover generally covering the entire front face of the intermediate layer; and

an inner air permeable cover generally covering the entire rear face of the intermediate layer, wherein

the intermediate layer is provided with a graduated filtering profile such that, along an airflow direction of the intermediate layer, particles of decreasing size are trapped.